

## CLAIMS

What is claimed is:

1      *DC 1* 1. A method for configuring a network, said method  
2      comprising the steps of:

4           dynamically determining when a component is added to  
5      a node of said network; and

7           in response to said dynamically determining step,  
8      configuring said network to provide support for said  
9      component.

1      2. The method of Claim 1, further comprising the steps  
2      of:

3           registering an OS with an management system of said  
4      network to provide a notification when said component is  
5      added; and

6           alerting said OS that said component is added during  
7      said configuring step.

1      3. The method of Claim 2, wherein said dynamically  
2      determining step is completed by said management system  
3      and includes the step of monitoring a network via a sweep  
4      operation for visible configuration changes.

1      4. The method of Claim 2, wherein said network includes  
2      a switch and said dynamically determining step includes  
3      the steps of:

4           detecting an addition of said component to a link of

5       said switch; and

6                in response to said detecting step, signaling said  
7                management system via a trap message that said component  
8                is on said network

1       5. The method of Claim 2 further comprising the steps  
2                of associating said component to at least one partition  
3                and to an OS within said at least one partition.

1       6. The method of Claim 5, further comprising the steps  
2                of:

3                detecting a partition of said network to which said  
4                component has been associated; and

5                notifying said OS of said component only when said  
6                OS is also associated with said partition.

1       7. The method of Claim 6, further comprising the steps  
2                of:

3                updating a component table available to said OS with  
4                information about said component; and

5                providing OS support to all components registered in  
6                said component table.

1       8. A system for configuring a network, said system  
2       comprising:

3               a network manager that dynamically determines when a  
4       component is added to a node of said network and  
5       configures said network to provide support for said  
6       component; and

7               a network administration utility that, and in  
8       response to said network manager dynamically determining  
9       when a component is added, notifies an OS registered with  
10      said network administration utility that said component  
11      is added.

12     9. The system of Claim 8, wherein said network manager  
13       determines when said component is added by periodically  
14       monitoring said network for configuration changes.

15     10. The system of Claim 8, wherein said network manager  
16       determines when said component is added by receiving a  
17       packet from said component indicated that said component  
18       is present on said network.

19     11. The system of Claim 8, further comprising a  
20       registration table for registering said OS with said  
21       network administration utility for notification of an  
22       addition of a component; and

23     12. The system of Claim 11, further comprising:  
24               a partitioning mechanism that associates said  
25       component with one or more of a plurality of partitions  
26       of said network; and

27               wherein said network manager notifies said OS only

6       when said OS is associated with a same one of said one or  
7       more partitions.

1       13. The system of Claim 12, further comprising a  
2       component registry available to said OS that is updated  
3       with information about said component when said component  
4       is detected, wherein said OS provides support to all  
5       components registered in said component registry to which  
6       it has access permission.

1 14. A network comprising:

2 a switch;

3 at least one node linked to said switch for adding  
4 components;

5 a network manager that dynamically determines when a  
6 component is added to said at least one node of said  
7 network and configures said network to provide support  
8 for said component;

9 an operating system; and

10 a network administration utility that, and in  
11 response to said network manager, dynamically determining  
12 when a component is added, notifies an OS registered with  
13 said network administration utility that said component  
14 is added.

15. The network of Claim 14, further comprising:

16 a partition agent that associates said component to  
17 one or more partitions of said network and controls  
18 access to said component via a partition monitoring  
19 function; and

20 wherein said OS is notified of said component only  
21 when said OS has an access permission to a same one of  
22 said one or more partitions.

23 16. The network of Claim 14, wherein said network is a  
24 system area network.

1       17. A computer program product comprising:

2               a computer readable medium; and

3               program instructions on said computer readable

4               medium for:

5               dynamically determining when a component is

6               added to a node of a network; and

7               in response to said dynamically determining

8               step, configuring said network to provide support

9               for said component.

10      18. The computer program product of Claim 17, further

11      comprising program instructions for:

12               registering an OS with an management system of said

13               network to provide a notification when said component is

14               added; and

15               alerting said OS that said component is added during

16               said configuring step.

17      19. The computer program product of Claim 18 further

18      comprising program instructions for associating said

19      component to at least one partition and to an OS within

20      said at least one partition.

21      20. The computer program product of Claim 19, further

22      comprising program instructions for:

23               detecting a partition of said network to which said

24               component has been associated; and

notifying said OS of said component only when said OS is also associated with said partition.

21. The computer program product of Claim 19, further comprising program instructions for:

detecting a partition of said network to which said component has been associated; and

notifying said OS only when said OS has access permission for said partition and said component.

22. The computer program product of Claim 21, further comprising program instructions for:

updating a component table available to said OS with information about said component, and

providing OS support to all components registered in said component table.